

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicants	: Yasunori MIKI et al.	Confirmation No. 8270
Appln. No.	: 10/505,453	Examiner: M. A. Elve
Filed	: September 1, 2004	Group Art Unit: 1725
For	: A CONTACT FOR A CONNECTOR AND A MANUFACTURING METHOD OF AN ELEMENT TO BE SOLDERED	

**REPLY BRIEF UNDER 37 C.F.R. § 41.41(a)(1)**

Commissioner for Patents  
U.S. Patent and Trademark Office  
Customer Service Window, Mail Stop Appeal Brief-Patents  
Randolph Building  
401 Dulany Street  
Alexandria VA 22314

Sir:

The instant Reply Brief is in response to the Examiner's Answer dated October 29, 2009, the period for reply extending until December 29, 2009. It is noted that an Office Communication was issued on November 13, 2009, in which the Examiner included JP-60-238489 Hashimoto et al. 11-1985, which was inadvertently missed in Section (8) Evidence Relied Upon of the Examiner's Answer.

In the Examiner's Answer, the Examiner maintains the grounds of rejection advanced in the final rejection of claims 1 and 6-22 and provides arguments in support thereof.

Appellants note that this Reply Brief is being filed under 37 C.F.R. § 41.41(a)(1) and is directed to the arguments presented in the Examiner's Answer, and therefore must be entered unless the final rejection is withdrawn in response to the instant Reply Brief. Appellants note that this Reply Brief addresses points made in the Examiner's Answer and does not repeat the arguments set forth in the Appeal Brief.

It is respectfully submitted that the Supplemental Appeal Brief filed July 6, 2009 has fully addressed the requirements for patentability of the pending claims. Accordingly, the herein contained remarks are merely supplemental to the Supplemental Appeal Brief filed July 6, 2009 and all previously proffered arguments in the Supplemental Appeal Brief are incorporated herein.

In order to facilitate review of the Reply Brief and for the sake of brevity, the present remarks do not include a discussion of all rejected claims or points raised by the Examiner, and such is not to be considered an acquiescence to the Examiner's rejections or remarks.

*SAITO et al. does not disclose (2) at least one selected from the following: (2-1) a metal alloy layer formed of alloying gold and nickel, (2-2) a diffusion layer formed of diffusing a material except gold of the metal alloy including gold, and (2-3) a metal alloy layer which is formed of evaporation and removal of at least a portion of gold and alloying the remaining gold and nickel.*

On page 11 of the Supplemental Appeal Brief, Appellants argued that SAITO et al. lacks any disclosure of a diffusion preventing area including (1) the foundation nickel plating layer unsheathed due to evaporation and removal of at least a portion of the gold or metal alloy including gold; and (2) at least one selected from the following: (2-1) a metal alloy layer formed of alloying gold and nickel; (2-2) a diffusion layer formed of diffusing a material except gold of the metal alloy including gold; and (2-3) a metal alloy layer which is formed of evaporation and removing at least a portion of the gold and alloying the remaining gold and nickel. Appellants respectfully submit that the Examiner's comments on pages 11-18 misstate the disclosure of the SAITO et al. reference.

Appellants noted in the Supplemental Appeal Brief that the SAITO et al. patent discloses that (A) the poorly wettable primer plating layer is formed by selectively removing a portion of the finish plating layer at the terminal section 111 and serves as an arresting region; (B) the exposed surface region of the base member is preferably copper or a copper alloy Cu--Ni; and (C) the finish plating material applied to the surface of the contact 11 is preferably gold, tin, or a tin alloy.

Therefore, the poorly wettable primer plating layer of SAITO et al. (corresponding to Appellants' diffusion preventing area) has **only** the feature of the foundation plating layer unsheathed due to evaporation and the removal of at least a portion of gold. The SAITO et al. patent discloses the diffusion preventing area having **only** the foundation plating layer unsheathed due to evaporation (*i.e.*, only a portion of (1) described above). **SAITO et al. does not disclose (2) described above.**

In this regard, in column 8, line 52, SAITO et al. discloses a gold plating layer. However, SAITO et al. does not disclose the use of metal alloy including gold as a finishing plating layer. Accordingly, it impossible to form (2-2) (*i.e.*, a diffusion layer formed of diffusing a material except gold of the metal alloy including gold) and (2-3) (*i.e.*, a metal alloy layer which is formed of evaporation and removal of at least a part of the gold and alloying the remaining gold and nickel) in the SAITO et al. device and method.

*SAITO et al. does not disclose forming a diffusion preventing area including (2) at least one selected from the following: (2-1) a metal alloy layer formed of alloying gold and nickel, (2-2) a diffusion layer formed of diffusing a material except gold of the metal alloy including gold,*

*and (2-3) a metal alloy layer which is formed of evaporation and removal of at least a portion of gold and alloying the remaining gold and nickel.*

On page 14 of the Supplemental Appeal Brief, Appellants argued that SAITO et al. lacks any disclosure of forming a diffusion preventing area including (1) the foundation nickel plating layer unsheathed due to evaporation and removal of at least a portion of the gold or metal alloy including gold; and (2) at least one selected from the following: (2-1) a metal alloy layer formed of alloying gold and nickel; (2-2) a diffusion layer formed of diffusing a material except gold of the metal alloy including gold; and (2-3) a metal alloy layer which is formed of evaporation and removing at least a portion of the gold and alloying the remaining gold and nickel. Appellants respectfully submit that the Examiner's comments on pages 19-22 misstate the disclosure of the SAITO et al. reference.

Appellants noted in the Supplemental Appeal Brief that the SAITO et al. patent discloses that (A) the poorly wettable primer plating layer is formed by selectively removing a portion of the finish plating layer at the terminal section 111 and serves as an arresting region; (B) the exposed surface region of the base member is preferably copper or a copper alloy Cu--Ni; and (C) the finish plating material applied to the surface of the contact 11 is preferably gold, tin, or a tin alloy.

Therefore, the poorly wettable primer plating layer of SAITO et al. (corresponding to Appellants' diffusion preventing area) has **only** the feature of the foundation plating layer unsheathed due to evaporation and the removal of at least a portion of gold. The SAITO et al. patent discloses the diffusion preventing area having **only** the foundation plating layer unsheathed due to evaporation (*i.e.*, only a portion of (1) described above). **SAITO et al. does not disclose (2) described above.**

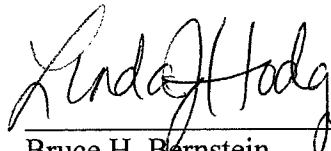
In this regard, in column 8, line 52, SAITO et al. discloses a gold plating layer. However, SAITO et al. does not disclose the use of metal alloy including gold as a finishing plating layer. Accordingly, it impossible to form (2-2) (i.e., a diffusion layer formed of diffusing a material except gold of the metal alloy including gold) and (2-3) (i.e., a metal alloy layer which is formed of evaporation and removal of at least a part of the gold and alloying the remaining gold and nickel) in the SAITO et al. device and method.

Accordingly, Appellants respectfully request that the Board reverse the decision of the Examiner to reject claims 1 and 6-22 under 35 U.S.C. §§ 102(b) and 103(a).

Thus, Appellants respectfully submit that each and every pending claim of the present application meets the requirements for patentability under 35 U.S.C. §§ 102(b) and 103(a), and that the present application and each of the pending claims are allowable over the prior art of record.

Should there be any questions, the Examiner is invited to contact the undersigned at the below-listed telephone number.

Respectfully submitted,  
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December 29, 2009  
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